



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,100	09/28/2001	Bruno Provot	213252US0	8191

22850 7590 03/07/2003

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

FIORILLA, CHRISTOPHER A

ART UNIT	PAPER NUMBER
----------	--------------

1731

DATE MAILED: 03/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-11

# Office Action Summary

Application No.

09/926,100

Applicant(s)

PROVOT ET AL.

Examiner

Christopher A. Fiorilla

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6,8 and 12 is/are rejected.
- 7) ☒ Claim(s) 7 and 9-11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_                      6) ☐ Other: \_\_\_\_\_

Art Unit: 1731

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,2,3,4,5 and 12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Boutin et al. (5,242,622) for the reasons as set forth in the previous office action.
3. Claims 1,4,5,6,8 and 12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by JP 61-77794 for the reasons as set forth in the previous office action.
4. Claims 7,9,10 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. Applicant's arguments filed 12/18/02 have been fully considered but they are not persuasive.

**With respect to the arguments under 35 USC 102 applicants argue:**

Art Unit: 1731

**Boutin et al. Neither disclose nor suggest the presently claimed invention since compression, presumably carried out in Boutin et al. at ambient temperatures, since no temperatures are disclosed, and sintering are carried out sequentially.**

This argument is not persuasive. First, it is submitted that the claims include open claim language and thus do not preclude a compression step before sintering. The examiner admits that the compression step of Boutin et al. occurs before sintering as set forth in the abstract thereof and the compression and sintering occur sequentially. The examiner however, did not rely upon the compression step of Boutin et al to teach the “sintering pressure” limitation recited in the claims. Boutin et al. teaches at col. 3, lines 20-22 that the sintering is carried out under pressure.

**There is, in effect, no “sintering pressure” applied in Boutin et al. or in Genshi, as that term would be understood herein, based on the description at page 15, lines 12-13, of the specification.**

This argument is not persuasive. Page 15, lines 12-13 of the specification simply recites: “sintering pressure: the pressure applied to the mixture during the sintering time”. This does not distinguish over the pressure recited in Boutin et al. at col. 3, lines 20-22. JP 61-077794A discloses that the sintering is carried out in an atmosphere of Ar-H<sub>2</sub>. Thus, sintering in JP 61-077794A does not take place in a vacuum. Since there is not vacuum, there is an atmospheric pressure being applied to the body being sintered in JP 61-077794A. The definition of sintering pressure in the specification does not distinguish over the teaching of JP 61-077794A either.

**One skilled in the art reading Boutin et al. or Genshi could not have predicted the disclosed results when employing the presently claimed sintering embodiment.**

This argument is not persuasive. The argument is not commensurate in scope with the claims. The claims do not require these specific "results".

**The examiner indicated during the interview of 12/12/02, as indicated in the interview summary, that the present claims are inclusive of sintering at atmospheric pressure. In reply, applicants respectfully submit that while the claims are to be given their broadest reasonable interpretation consistent with the specification, the examiner's interpretation is not reasonable. Since it is at least implicit from the term "sintering pressure" that pressure is applied, it is clear that simply sintering the homogeneous mixture at atmospheric pressure would not lead to the recited composite material".**

This argument is not persuasive. It is maintained that the examiner's interpretation of the claims is reasonable for the reasons as set forth above (i.e. the phrase "sintering pressure" is broadly defined in the specification and the disclosure of the references meets this broad definition). The examiner agrees that the term "sintering pressure" indicates that pressure is applied, however, the examiner maintains that the pressure may be any applied pressure including, e.g. atmospheric pressure. Applicant is directed to the reference cited of interest, Nishiyama (5,024,813) which at col. 6, lines 15-17, uses the phrase "sintering pressure" to describe ambient or atmospheric pressure. Thus, one skilled in the art recognizes that the term "sintering pressure" may be used to refer to pressures such as atmospheric pressure.

**Even if the examiner's interpretation were correct, the claims would still be patentable over the applied prior art, which discloses sequential compression (or molding) and sintering, while the present claims recite sintering under pressure.**

This argument is not persuasive for the reasons as set forth in response to the first argument.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nishiyama (5,024,813) which at col. 6, lines 15-17, uses the phrase "sintering pressure" to describe ambient or atmospheric pressure.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher A. Fiorilla whose telephone number is 703-308-0674. The examiner can normally be reached on M-F, 6:30am-3:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin can be reached on 703-308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7718 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.



**Christopher A. Fiorilla**  
**Primary Examiner**  
**Art Unit 1731**